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## SOME FEATURES OF THE ONTARIO STATUTES AND THEIR ADMINISTRATION AFFECTING WATER SUPPLIES AND SEWERAGE SYSTEMS.<sup>1</sup>

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It is the writer's pleasure and privilege as a Canadian and a member of this association to report progress in the province of Ontario. In reading this paper it is hoped to convey to the association not only some idea of the excellence of the existing statutes in Ontario, but a short summary of the history and development of the clauses affecting water supplies and sewerage systems.

Practically all legislation which places municipal enterprises under control of government commissions is of recent enactment. This is also true of legislation relegating the control of water works and sewerage installations to federal, state or provincial health bodies.

In 1873 there existed no central organization for the administration of public health regulations in Ontario. The authority at that time was vested almost entirely in the members of the municipal councils, who by virtue of their office became health officers. The act relegating authority to the municipal councils would not in this day be considered at all complete. One of the typical sections of that act reads:

Any two of these officers shall have the right to enter into and upon the premises in the day time for the purpose of examination to see whether they were in an unclean or filthy state.

They had power to order the proprietor or occupant of the premises to remedy the condition; they could also order persons suffering from contagious diseases to be removed to some hospital, when the medical practitioner reported that this could be effected without danger to the health of the patient. There was apparently no regulation whatever respecting water supply or sewerage, although there existed at that time in the municipal act a clause giving power

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to a council to pass by-laws, for preventing the wasting and fouling of public water, and for regulating the construction and drainage of cellars, sinks, water closets, privies and privy vaults.

The Provincial Board of Health of Ontario was not created until 1882 and from that date until 1911 the control of the Local Boards of Health was vested in this central body. This body had a secretary with offices in the Parliament buildings. He had a good deal of executive power, but all plans, etc., relating to water and sewage were left to the board, and decided at the quarterly meetings.

The Municipal Water Works Act of 1882 gave to municipalities rather wide powers. (1) Providing for the control of streams acting as sources of municipal water supplies within a distance of one mile, in the cases of villages or towns, and three miles in the case of a city. (2) Prohibiting the draining of sewage or extraneous matter that would in any way taint or foul the source of a water supply. There is no mention of water purification works in this act, efforts being directed mainly toward exclusion of pollution. Strangely enough no mention of this matter appears in the Public Health Act of that date. The passing of this act in 1882 coincides very well with the period when so much was talked of about the self-purification of streams. Bacteriology at this date was a very young science.

In 1884 the Public Health Act was further amended and provided that:

Whenever the establishment of a public water-supply or a system of sewerage should be contemplated by the council of a municipality it shall be the duty of the said municipality to place itself in communication with the Provincial Board of Health and to submit all plans in connection with said system to the board.

The board was authorized to enquire into and report upon the plans; copies of this report being forwarded to the municipal council and also filed with the government. This act also contained a general clause which required that:

No sewer or by-laws for extending the same shall be constructed in violation of any of the principles laid down by the Provincial Board of Health and subject to appeal to the Lieutenant-Governor-in-Council.

It seems rather strange to think that as recently as 1886 such an indifferent character of legislation could exist, although research

assures one that the information existing at this date upon the subject of epidemiology and the control of the pollution of streams was largely a blank as far as useful knowledge was concerned.

The executive health officers of the various municipalities met and formed an association. The activities of this body, which was largely controlled through the Provincial Board of Health, materially influenced the advance of sanitary science. Perhaps the greatest advantage at this time was the manner in which their deliberations included citations of European efforts, especially those of the Rivers Pollution Commission and the Local Government Board, who were doing a splendid work in advancing legislation and publishing information along these lines. In considering the amendments of this period one must remember that very little exact information was forthcoming until the reports from the Lawrence Experimental Station were issued in 1891, 1892, and 1893 and these for several years remained largely in the hands of the laboratory workers.

In 1895 the act was further amended, and required municipalities to furnish, together with the plans of the proposed works, an analysis of the water from the proposed source. The analysis was a chemical one and the water was reported upon largely according to old albuminoid standards. The act recited that "where the Provincial Board reported against the supply it should not be lawful to establish such works." The jurisdiction of the board was increased; the board was now permitted to suggest changes in connection with the plans submitted and its decision became binding subject to appeal to the Lieutenant-Governor-in-Council.

It was not until 1906 that the act was amended and a clause inserted making it unlawful to discharge sewage, drainage, domestic or factory waste, excrement or other polluting matter of any kind whatsoever, which either by itself or in connection with other matter corrupts or impairs the quality of any water supply. A penalty under the act was set at \$100 for each conviction and each week's continuance after notice was set out as constituting a separate offence.

The most forward step of the legislature was taken in 1911 when it was enacted that the chief health officer, who was also the secretary, should be the executive officer of the board and at intervals between meetings of the board should perform such duties and acts and have such powers as are by the act vested in the Provincial Board of Health. To those of you who are interested in the adminis-

tration of legislation such an amendment can be seen to be of the utmost advantage. Applications from municipalities can now be considered as soon as received instead of being held some times for several months for a quarterly meeting of the board. The act was further reinforced and a section added reciting:

That no by-law shall be passed for the raising of money for water and sewerage purposes until the proposed water supply or sewerage system, as the case may be, has been approved by the Provincial Board of Health, and such approval has been certified to and signed by the chairman and secretary of the board.

It provided that the preamble of the by-law should recite such approval.

During 1911 and 1912 the Public Health Act was carefully revised, drawn by Mr. John W. S. McCullough, M.D., D.P.H., the present chief officer of health, and was passed by the legislature in 1912. One important amendment stands out and provides that

96.—(1) Where the Provincial Board reports in writing that it is of opinion that it is necessary in the interest of the public health that a water works system or an adequate water purification plant, or a sewer or a sewerage system, or an adequate sewage treatment plant, should be established or continued, or that any existing water works system, water purification plant, sewer or sewerage system, or sewage treatment plant, should be improved, extended, enlarged, altered, renewed or replaced, it shall not be necessary to obtain the assent of the electors to any by-law for incurring a debt for any of such purposes.

A further clause was added to the act requiring municipalities to make reports to the board of such information as may be required by it, on forms to be furnished by the board. This clause was especially arranged to apply to both water works and sewerage. The wording of the clause respecting submission of plans was slightly altered and made to apply to extensions of existing systems as well as to new systems.

In 1914 the act was further modified to permit with the approval of the Provincial Board of Health the sewage disposal system of a muncipality to be continued into or through or to be situate in any adjoining township municipality. The act provides that before approving of such work the Provincial Board of Health shall give notice to the clerk of the township that such application has been made, and shall hear all objections before granting approval. After the approval has been granted the municipality receiving such ap-

proval is permitted to expropriate and arbitrate the value of the lands the same as if the work had been situate within the limit of the municipality. An interpetation of this clause indicates that damage by reason of the location of the works will not be allowed.

The Ontario Railway and Municipal Board is a body which is empowered by the legislature to validate certain classes of debenture issues. Owing to carelessness in municipal government many illegal debentures have been sold at one time or another in perfectly good faith. Purchasers of such debentures on being made aware of the irregular character of their holding naturally desire to validate them; to make this possible certain powers of the legislature were delegated to the Ontario Railway and Municipal Board. The municipal act was amended in 1914 to provide for irregularities in water and sewage debenture issues. This amendment reads:

In the case of a by-law for raising money for any of the works or apparatus mentioned in sections 89-94 of the Public Health Act the board may upon presentation of a certificate by the Provincial Board of Health approving the said works, grant a certificate approving the by-law notwithstanding that the certificate of the Provincial Board of Health was not obtained prior to the passing of the by-law or that the by-law does not contain the recital of such approval.

This sub-section was made retro-active since 24th March, 1911. It is also of interest to note another amendment of the municipal act of last year, which recites:

That where under this or any other act power is conferred on a municipal corporation to borrow money for any purposes without the assent of the electors it shall include not only the power to borrow money to issue all debentures but also the power to agree with any bank or person for temporary advances to meet the expenditures incurred from time to time for such purposes.

The recital of legislation is usually a rather dry affair to those of us who are interested in getting things done. The lack of legislation is a terrific handicap, and it was largely with the idea of presenting you a complete record of the legislation in Ontario that this paper was prepared. As you will see that legislation began in 1873 with the power distributed and vested entirely in the municipal bodies. This has gradually been withdrawn step by step and conferred upon a central body and has been reinforced in such a fashion as to make it effective. Naturally one asks is there any real advan-

tage in such centralization of power. Personally when it comes to a matter of handling town planning and civic developments it seems to be perfectly apparent that centralization is almost imperative. The difficulties that disappear with centralization of power are those of improper administration, limited information and biased opinion.

It was discovered shortly after the passing of the Ontario Public Health Act that its administration required not only a first-hand knowledge of municipal conditions and finances, but also an intimate knowledge of the problems associated with sewage and water purification. To make possible this latter an experimental station for the examination of water and sewage and purification processes was erected in 1909 and has been operated since that date. At this experimental station graduate students in the engineering courses and in medicine are given the opportunity of doing post-graduate work, for which they receive a nominal salary. Their energies are controlled by the Provincial Board of Health and their work is mainly directed to research in the operation of purification units and apparatus. The legislature grants an appropriation each year for this work.

Some few months ago, in order that further advantage might be taken of the control exercised by the Provincial Board of Health and to assist in reporting upon extensions requiring the approval of the board, standard regulation and application forms were designed in the office of the board, one for water and one for sewage. forms were referred to some seven of our representative city engineers for comments before being approved as a regulation under the act. In arranging these forms the endeavor has been to ask of the designing engineer such information as should rightly be in his possession when designing work of this character. To careless engineers the information required seems to be rather burdensome, but to those who have introduced an orderly habit into their work it It is the intention of the board causes no inconvenience whatsoever. to circulate the information received through municipalities, so that in a general way they may be informed of what their neighbors are doing, as well as the current prices obtained for different classes of material. It appears to the writer that the general result of this supervision will be towards the standardization of all work of this class in the province. Such a consummation is one which we all know to be to the utmost advantage of all concerned. this kind must needs be slow in their onward march. Advances

which threaten to centralize power are not as a rule well received by the uninformed.

It has been, and will continue to be the endeavor of the Board of Health of Ontario to make this centralization of power, especially with reference to the control of works pertaining to sewage and water, more in the nature of coöperation than autocracy.